Mr. Matt Rota Gulf Restoration Network P.O. Box 2245 New Orleans, Louisiana 70176

## Dear Mr. Rota:

The Louisiana Department of Environmental Quality (LDEQ) acknowledges receipt of your comments concerning the draft TMDL for Bayou Pointe au Chien (Subsegment 120605). Our responses are provided below, following the format of your comment letter.

## Permit limits and monitoring on the Pointe au Chien School should be more protective.

The discharge from the Pointe au Chien School was considered and evaluated through the TMDL survey and modeling process. A review of the DMR's from the school revealed that the school's effluent is well within the permit limits (low BOD's and TSS), and that the discharge volume is fairly small (below 2500 gpd). This translates to a very small BOD load contributed by the school. The school was inspected in 2000, and there were no problems observed at that time. The site was also visited during the TMDL survey. The school does discharge into a drainage ditch, and the ditch flows into Bayou Pointe au Chien. Concerning the current permit minimum requirement for dissolved oxygen, a minimum of 2 mg/L is a common minimum set for effluent dissolved oxygen for treated sewage wastewater. Regulations do not require that the effluent meet the water quality criterion for dissolved oxygen. The water quality criterion of 5 mg/L applies to the surface waterbody, and it is affected by a number of factors including flow and reaeration of the waterbody, temperature, and loading of biochemical oxygen demand constituents. The BOD load is limited in order to ensure that the dissolved oxygen criterion is maintained in the receiving water as the organic load breaks down as it moves downstream. The model sensitivity analysis showed that the in-stream dissolved oxygen concentration in Bayou Pointe au Chien was most sensitive to reaeration. Based upon the survey work, historical records, and the modeling of Bayou Pointe au Chien, LDEQ scientists believe that requiring this school to meet more stringent effluent limits will have little to no beneficial effect on the quality of the stream.

The main problem with this segment of Bayou Pointe au Chien is that there is no sustained flow. Its primary function is drainage. There was no flow at the time of the survey, and the only water in the receiving ditch appeared to have back-flowed from the bayou. It was also noted during the

Mr. Matt Rota August 2, 2006 Page 2

TMDL survey that there appeared to be a good many single home sewer treatment outfalls that go into the system. The loading from any such discharges is accounted for in the model as nonpoint source loading.

## The current dissolved oxygen standard should not be reduced

Last year, the LDEQ identified and began to sample reference streams in the Terrebonne Basin as part of an extensive basin-wide project to evaluate current water quality standards. The objective of this project is to accurately characterize the waterbodies of this region of the state and to refine water quality standards for these coastal waterbodies. This project includes water quality sampling, in situ monitoring of dissolved oxygen levels, biological sampling, and habitat assessment. As water quality standards are refined to more accurately reflect the natural conditions of our waterbodies, the accuracy of our TMDLs will improve. This will in turn allow us to more efficiently direct our management programs. Revisions to the dissolved oxygen criteria will not preclude or end on-going efforts to reduce nonpoint sources of pollution in the basin. These efforts will continue. As with any revisions to our water quality regulations, any changes to water quality standards that may be proposed based upon this characterization project will be made available for public review and comment prior to adoption.

LDEQ appreciates your comments.

Sincerely,

Emelise Cormier Senior Environmental Scientist Water Quality Assessment Division

Cc: Golam Mustafa, U.S. EPA Alicia Walsh, LDEO